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## REMARKS ON UTERINE HÆMORRHAGE.

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*To the Editors of the Boston Medical and Surgical Journal.*

I PROPOSE to offer a few remarks upon two forms of uterine hæmorrhage, to which we are especially obnoxious in our vicinity. The first form of which I would speak occurs in the unimpregnated uterus, and with nearly equal frequency in the single and the married. It is considered a hæmorrhage, and not excessive menstruation, from the facts that the catamenial periods are more or less regular as to time, often remarkably so; that the menstrual flow begins moderately and normally, the patient, except in extreme cases, being able to keep about the house; that this continues, gradually diminishing, after the second or third day, until the fifth day, and that then, with remarkable regularity in many cases, the true bleeding commences. From that day, for a longer or shorter period, the sufferer is confined to the bed, and the loss of blood is often very great.

The source of this bleeding is ulceration in some form or other, or exuberant fungoid granulations, like those so common on the surface of the body in the second stage of carbuncle.

In those cases where the ulcer is on the external surface of the os and cervix, the diagnosis is easy; but in those other cases, where it is entirely within the cavity of the cervix, it is not always easy to recognize it. And ulceration in this latter situation has given rise to the most frightful hæmorrhages I have met with in the unimpregnated organ. More than once, a grave suspicion of the existence of an intra-uterine polypus has been aroused, only to be dispelled by the most positive assurance of the normal size of the uterus, the unaltered condition of the uterine cavity, and by the successful result of local treatment.

The prognosis in this form of uterine hæmorrhage should, in extreme cases, always be guarded. For though it seems a simple matter enough to promote the healing of an ulcer in these regions, the constitution of the patient is often too seriously impaired before our attention is called to the disease. The usual unfavorable termination,

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in the cases which have come under my observation, has not been that which occurs in chlorosis and in anæmia. The great scourge of our climate—phthisis—has closed the scene in all my unfavorable cases, and the arrest of the hæmorrhage has been followed by the final cessation of all catamenial flows and by the rapid development of tubercle. Therefore, when a patient shows an habitually rapid pulse, a tendency to dyspnœa, however slight, a cough, and any physical signs of tubercle, the chances of recovery are fearfully against her. If, in addition, she is not tolerant of tonics, especially iron, her case is the more desperate.

The indications for treatment are simple enough, viz.: to control the hæmorrhage during its occurrence, to promote the healing of the ulceration, and to build up the general health of the patient.

The ulceration can be made to heal readily enough by the energetic or thorough application of nitrate of silver, and by the employment of sedative, alterative, and astringent applications by means of medicated pessaries and injections. When it is confined to the cavity of the cervix, the pencil of caustic requires to be introduced as far as possible, and should be sharpened by means of a wet sponge, that it may reach every part of the disease; otherwise a portion may be hidden between the rugæ of the mucous membrane, and, escaping the touch of the pencil, may render the case unnecessarily protracted and tedious. To be effectual, too, the application should be painful, the lining membrane being much more sensitive than the covering membrane of the os. It is unnecessary to enlarge upon the means of promoting the cure, as they are treated fully enough by all authorities upon the disease.

The means of arresting the hæmorrhage at the period of its occurrence have not been treated of so fully, and it may not come amiss to notice a few of them.

During the first four or five days, the menstruation being usually natural, or but little in excess of nature, nothing is to be done, save to restrict the patient to a very moderate quantity of exercise. But when, upon the morning of the fourth or fifth day, the true bleeding commences, it is of vital importance to the safety of the patient to check it as soon as possible. To this end cold-water injections by the rectum are of great use in two ways—by cooling down directly and constricting the uterine engorgement, and by freeing the bowel from all accumulations, which of themselves greatly aggravate the trouble.

Cold applications to the bowels and perfect rest in the recumbent posture should also by no means be neglected. But the remedy upon which I am accustomed to place my chiefest reliance is the tampon of solid alum. This should be applied well up to the os, as soon as the true hæmorrhage comes on; this can easily be done by the patient herself, and it should be allowed to remain from two to six hours, according to the severity of the symptoms. It always arrests the

flow for the time, and usually for the whole present catamenial period, though if one application be not enough, there is no danger, nor usually inconvenience, in renewing it at intervals of twenty-four hours two or three times.

As to remedies by the mouth, they do not amount to much; though I have sometimes derived decided advantage from the use of alum in powder, in five-grain doses, combined with some aromatic, and repeated at short intervals, say every two hours. The stomach usually tolerates it very well.

Lead I never use, and the vegetable astringents have not much power, or else disturb the stomach, with the exception of matico, which is often a valuable tonic where the stomach bears nothing else. Iron, in the early stages of the trouble, almost invariably makes matters worse, no matter under what form it is given. Later in the case, it is often invaluable.

There is one simple remedy, which we are in the habit of considering nearly inert, from which I think I have had quite positive results, and that is the spiritus lavandulæ compositus, given in small doses—fifteen drops every three hours. It is not only an acceptable stomachic and restorative, but has a decided astringent influence—in mild cases diminishing the sanguineous discharge to a marked degree. In full doses it rarely fails to disagree, causing nausea and præcordial distress.

Stimulants, spiced wines, brandy, and the like, so often resorted to for relief from the faintness which loss of blood causes, only aggravate the disease while temporarily relieving the symptom, and are in all cases, with very rare exceptions, positively injurious and contra-indicated.

The second, and much the most immediately formidable form of uterine hæmorrhage to which I would allude, is that which occurs as a consequence of delivery.

The usual story in these cases is, that the mother was overworked to the last moment, and labor begins with the whole muscular system more or less exhausted. The number of children the patient has borne has much influence in producing the trouble, the uterus wearing out, as it were, under the very frequent calls upon its energies. But some very serious cases of *post-partum* flowing have occurred, under my care, in primiparæ.

A fortnight's wash, or a week's baking for a large family are amongst the most common preliminaries of such cases. But this, again, is not an invariable rule, for one of the most insidious and dangerous cases I have ever had was that of a wealthy patient, who enjoyed an average of very good health, and who lived in every way most rationally. The constitution of the blood had probably much to do with the trouble in this case, the patient being naturally of a lax fibre, though bearing muscular exercise well enough, and accustomed to take a good deal of it.

The warning symptoms of hæmorrhage are well enough known. The restless, impatient toss of the head first, the hasty ejaculation, the hæmorrhagic pulse, never less than 80, often much above 100, the absence of all uterine tumor after the expulsion of the placenta, are all warnings readily recognized and sufficiently appreciated by each of us. There is, however, one symptom which has been an almost invariable attendant of my severe cases, and which I have never seen alluded to; and that is, a peculiar, indescribable odor of the placenta, membranes and lochia, very penetrating, very different from their natural odor, and that is bad enough, and like nothing else that I know of.

That this has some connection with the flowing, I am led to believe from the fact that before I recognized the frequency of the coincidence, the presence of the taint always caused a feeling of uneasiness and apprehension, too often confirmed by the subsequent course of events.

As to the means of arresting the bleeding, it is unnecessary to speak of those that are well known. Ergot, galvanism, stimulus, cold pressure on the abdomen, causing the uterus to expel its contents and to follow up its contractions afterwards, we all have used. But there are a certain proportion of desperate cases in which all these means fail us, and where it becomes a serious question what to do next. Writers tell us that the act of vomiting conduces to the safety of the patient, producing, or being followed by contraction of the uterus. Emetics have been suggested as a means of producing contraction. It has not been so in my experience, and I have grown to regard vomiting as the most formidable symptom possible. Ergot, brandy, wine, ether, hot drinks and cold, ice even, will sometimes come up as fast as we turn them down. Each act of vomiting has been followed by a relaxation of the uterus the more obstinate, by a collapse the more alarming, the uterus pouring out blood, like water from a well-saturated sponge. I would here say that I always regard it of the utmost importance that the uterus should, by contractions, expel the placenta in all cases, except where there is adhesion or hour-glass contraction. With these exceptions, it is rare that we need fail in causing it to do so, and usually a few minutes' compression will cause the contraction to be permanent.

The means, then, that have never failed me in the most severe hæmorrhages are, in the first place, the local application of ice. The safety of applying ice to the os uteri, in cases of non-contraction, has often been discussed. It seems to me the only element of danger in this treatment is, that it is not carried far enough. Ice, to be effectual, should be carried through the os up to the very fundus, and should be kept there; the hand and arm acting as a tampon and preventing the escape of blood from the sinuses until the uterus contracts. A cold left hand upon the abdomen materially assists in producing the contraction, and when it occurs, and not until then, be



the time longer or shorter, should the uterus be allowed slowly to expel the hand and arm. Once contracted in this manner, it has never relaxed again in any of my cases.

In the second place, to allay the vomiting, to quiet the terrible restlessness, to avert the collapse, when all other means have failed, I have depended upon opium, given in small doses at very frequent intervals. Ten drops of the acetated tincture of opium, or fifteen of laudanum, with an equal quantity of the aromatic spirits of ammonia, in a very little cold water, not more than a drachm, given every fifteen minutes, constitute my usual prescription. This is very rarely rejected, and should be persevered with if it is. Two hours is the longest time I have stood over a patient waiting for the desired result—the first fifteen minutes of quiet sleep, which puts her life out of immediate danger. We can all testify as to what a load of anxiety this brief interval of repose removes from the attending physician, and the great relief it brings us.

As to the *modus operandi* of opium, I can say nothing, except perhaps in the words of Dr. Meigs, that it acts “as the great restorer of the vital forces.” I certainly can add the small weight of my testimony to his when he says, alluding to these cases, “Gentlemen, be not afraid of opium.”

I offer these remarks, gentlemen, not as anything new or original, but simply as the record of my own experience upon given points, and as just so far valuable and no farther.

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#### CASE OF LUMBAR ABSCESS.

[Communicated for the Boston Medical and Surgical Journal.]

EARLY in the autumn of 1863, the Rev. Wm. P—— was taken with acute pain in the hip and thigh of the left side. His symptoms in a day or two led to an examination of the spinal region, over the central lumbar vertebræ. It was evident that there was deep-seated inflammation at this point. The ordinary remedies were used. Very rapidly the constitutional symptoms of purulent collection presented themselves, but it was several weeks before the enlargement was very marked upon the surface. It then filled out over the transverse processes of the lumbar vertebræ. I now used a small-sized trocar with canula, and drew away a large quantity of pus. Every few days I drew off this collection, twice taking away as much as twenty ounces. But now the abscess opened into the bowel, giving a large discharge of pus from the rectum. I at once made a free incision into the abscess, having to cut deeply through nearly the whole mass of lumbar muscles. The patient appeared to be rapidly sinking. This was effectual in stopping the discharge from the rectum, the flow of pus coming now through the free opening. For many weeks it was just a balance between the *supply* and the *drain*, but at last

it was decided in favor of supply, and the patient began to rally. A seton was now passed through the abscess, and worn the following winter, spring and summer. At the time of introducing the seton, the transverse process of one of the lumbar vertebræ (the second, I believe) was found diseased. When the seton was removed, Mr. P. was only troubled with want of power in the knee and leg of the affected side.

Owing to the mind and body being overtasked, the same symptoms presented themselves in the autumn of 1865. But now they were promptly met by a free incision and evacuation of the pus, and the same general treatment as before. A seton has been worn steadily until removed the first day of August, 1866. He did not run quite so low with this attack, and has rallied more satisfactorily than before. With each attack the suffering was extreme, and would have been constant without the use of anodynes. Fortunately, morphine acted *only* favorably with him, neither deranging the stomach, interfering with his appetite, nor clouding his brain; so that I was able to keep the pain under control most of the time for several months, and then very rapidly stopped the use of the drug. Nourishment of the strongest kinds he was able to take throughout his sickness. Alcoholic stimulants, being disagreeable, were not used. When he was very low, ammonia was used. Iron in different forms, quinine, and iodide of lime, were used as required. Very little else in the shape of medicine was given. Rest from *all* that taxes his nervous system is required. He did not take it before, hence the relapse. He won't take it at home, therefore he has been advised to go elsewhere for it. Good air, good diet, moderate exercise, and no smoking, is his prescription for daily use, to be followed for months.

*St. Stephen, N. B., Aug. 25, 1866.*

WM. H. TODD, M.D.

#### RATIONAL MEDICINE AT LA CHARITE—TREATMENT OF PNEUMONIA.

*To the Editors of the Boston Medical and Surgical Journal.*

A SHORT time ago you published some extracts from the *Lancet* indicating the progress of Rational Medicine at Guy's; will you now have the goodness to re-print a few paragraphs from an article in the last number of Championnière's Journal (Eng. Ed.), showing the state of things in this respect at *La Charité*. Your readers will not fail to see in them a strong resemblance to the doctrines advocated hereabouts for some time past. One can almost imagine that M. Jaccoud had just risen from reading one of our late annual discourses, so similar are the sentiments of the two, and even the language.

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"Whoever has attentively studied the works of the masters who have enriched science by their writings, and has personally observed

the symptoms and progress of pneumonia with a discriminating judgment, will avoid the error of asserting that this disease is amenable to a treatment invariably the same, or to any specific medication. In order to form a correct estimate of the numerous methods advocated by authors for the cure of pneumonia, it is absolutely necessary to take into account the influence of the age, constitution, precedents and idiosyncrasy of the patients, and the modifications which localities and the prevalent type of disease impart to that affection. The practitioner must, above all, recollect that the remedial measures at our disposal do not, like bullets, go straight to the heart of the enemy. Like variola, pneumonia runs its course with regularity, or meets with obstacles of various nature which may cause a fatal termination. It is against these obstacles that our remedies are directed, and their removal should be the object of our efforts, in order to restore the complaint to its physiological conditions. Now, the debility of the system is one of the most formidable of the obstacles, which the prevalent theories of inflammation have too often caused us to lose sight of."

"The above remarks indicate the general spirit of the lectures delivered at La Charité by M. Jaccoud, who temporarily supplies the place of Prof. N. Guillot, on the subject of pneumonia, and which were suggested by a case in which the exhibition of alcohol was deemed necessary. We shall advert in the present article merely to the question of treatment, and to the comparative estimate instituted by the Professor of the various methods resorted to in genuine pneumonia in the adult."

"*Absence of Treatment.*—From a document published in 1849, by Dielt, we learn that in 189 cases of pneumonia, merely dietetic measures were prescribed, and that the average of deaths was 7·4 per cent. only; whereas in 85 cases treated by venesection, and 106 by tartar emetic, the mortality was 20 per cent. in the former, and 20·7 in the latter."

"*Depletion.*—Statistics drawn up at Edinburgh show a mortality of 27·06 per cent. in 783 cases of pneumonia treated by bleeding."

"*Tartar Emetic.*—We have stated that Dielt records a mortality of 20·7 per cent. in 106 cases exclusively treated by tartarized antimony. Rasori finds a corresponding average of 22·06 in 640 cases."

"*Bleeding and Tartar Emetic.*—The average mortality in the cases recorded by Laennec, Grisolle and Skoda, was from 12·5 to 16 per cent."

"*Restorative Treatment.*—Of 129 cases of acute pneumonia in which tonics and food were allowed, at the Edinburgh Infirmary, Mr. J. H. Bennett lost but 4, a proportion of 1 in 31·25." \* \* \* \*

"In the case selected by M. Jaccoud to illustrate his remarks, although the oppression was considerable, the Professor did not resort to bleeding. \* \* \* \*

"On the first day he merely watched the symptoms, and abstained from interposition. On the morrow, hepatization was completely effected, and occupied the middle and inferior lobes of the lungs. The weakness and dyspnoea had increased, the voice was more broken, and the pulse more feeble—in short, constitutional aggravation had occurred; but far from regretting that he had not previously resorted to bleeding or other debilitating measures, M. Jaccoud congratulated himself on not having contributed his share to the aggravation of the case; and determined on exhibiting active stimulants, in the shape of an ounce and a half of brandy, to be taken in the course of four and twenty hours."

"Abuse is, however, to be avoided, and alcohol should not be prescribed in too large quantities nor for too long a period. \* \* \* The stimulant prescribed in moderation will, on the contrary, yield most satisfactory results. Such was the case in M. Jaccoud's patient, in whom an amendment was promptly noticeable. Two ounces of brandy were prescribed on the second day, and this dose was persevered in for six days. Mere diet-drinks and tisanes were ordered on the seventh and eighth days." \* \* \*

"In conclusion, M. Jaccoud opines that pneumonia has a tendency to spontaneous resolution, and that no remedies should be resorted to but such as are calculated to overcome any obstacles that may arise to the naturally favorable termination of the disease. In its uncomplicated condition, pneumonia runs its course in spite of all the efforts of art. Under these circumstances, medical interference should be confined to a removal of the complications, and this important fact should always be borne in mind, that resolution cannot take place unless the system is endowed with a certain amount of power."

#### DR. WEBBER'S ESSAY ON CEREBRO-SPINAL MENINGITIS.

[Continued from page 125.]

At Minisnick, Orange Co., N. Y., in 1808–9, it was seen and described by Dr. Arnell. He speaks of an "indescribable distress about the præcordia," and says sight was at times temporarily lost.\*

In 1810, this disease was seen in York County, Maine, and was observed until 1812; it was again seen in the autumn of 1814 and spring of 1815. It is said to have "differed from all other diseases, and yet it assumed in different subjects the livery of all."†

It was in 1810 that a committee was appointed by the Massachusetts Medical Society to receive communications and report on this then new disease. The committee consisted of Drs. Thomas Welsh, James Jackson and John C. Warren, and on the 21st of June they

\* American Medical and Philosophical Register, vol. i.

† New England Medical Journal, vol. iv.

made their report, which was afterwards published. It appeared in Dana at the beginning of that year, and more cases after the middle of January. Also, it appeared at Petersham in the latter part of February; at Barre, Oakham, Rutland, Paxton, Hardwick, New Braintree, Brookfield, Spencer, Sturbridge, Winchendon, Athol, Gerry, Leicester and Worcester, during March; Cambridgeport on the 24th of March, and at Lancaster in April; in April and May at Boston, and also in many towns in Worcester and Middlesex Counties; during May in Springfield. The headache is noticed as a universal symptom and as one of the first, or the very first occurring. Delirium seems to have attracted more attention than in previous years; it was generally mild, though at times furious. The account of the symptoms does not differ materially from that already given. Among the varieties of the disease, the following is given as a description of some cases which occurred, especially among females. "Universal, deadly coldness; skin white as polished marble, and smooth; countenance perfectly placid, not one distorted muscle; pulse at the wrist imperceptible; motion of the heart scarcely to be felt; respiration visible only by gasping, and that not frequent; and, as it were, only a step between this imperfect state of life and death." Even from this state of deadly stillness patients were restored to life and health.

A good description of the usual eruption is given, together with some anomalous appearances of the skin. "The spots on the skin are of various descriptions. They occur in all stages of the disease; less frequently, however, on the first than on the subsequent days. Frequently a rash or miliary eruption only appears, or a few blotches on the inside of the elbow and other similar parts; and it has been suggested that these may be produced by the mode of treatment usually adopted. The blotches are florid, or red and fiery. An appearance like measles has also been noticed, and likewise vesicles and pustules, which have been compared to the vaccine and variolous eruptions. In some cases these spots and eruptions have appeared at succeeding periods, two or three times in the course of the disease. The vesicles and pustules are very frequently torn by scratching; after which, or without being torn, they are commonly followed by scabs of a brown color, but occasionally they are followed by ulcerations, which do not heal until after recovery. These affections of the skin are often attended with itching; and independent of them itching very frequently occurs, especially on the third day, when the symptoms become more favorable at that time. This itching is sometimes extremely violent, so that the patient will almost tear up his skin in endeavoring to alleviate it. All these affections are frequently noticed at the time when the more important symptoms abate or subside. In a few cases, vesicles containing a bloody fluid occurred in the county of Worcester. These vesicles were compared to blood-blisters, and were about the size of a large pea; they appeared on vari-

ous parts of the body and limbs; in a few days they broke, discharged a bloody fluid and scabbed over. In one case, in which the attack was very violent, blisters resembling those produced by cantharides appeared on the second or third day on the breast and on one foot. They were about five inches in length and nearly one in breadth. On the fourth day from the attack, some of those on the breast and that on the foot became black and dry, and the skin was sphacelated. The eschars, with due treatment, left clean ulcers, which healed without scars."

The petechiæ and vibices "occur in comparatively few cases of the disease. They are of worse portent in proportion as they are more dark colored." They were not always found in fatal cases nor confined to such.

In the appearances upon examination after death, there was a close resemblance to the disease as seen at the present day. When the cranium was separated from the dura mater blood was discharged; serum was found beneath that membrane, being sometimes of a red color. The sinuses, especially the longitudinal, were filled with blood; there was also congestion of the surface of the brain. Between the arachnoid and pia mater there was found an opaque substance—coagulated lymph—which followed the course of the vessels. The hemispheres were sometimes adherent to the dura mater and to each other. There was serum in the lateral ventricles; and the choroid plexus was thicker and harder than usual.

The blood was unusually dark in the heart.

"In one case the cavity of the thorax was the seat of very considerable disease. The heart was inflamed, and exhibited a large, thick flake of yellow lymph on its anterior face. The pleura of the right side, both of the ribs and lungs, was covered with the same substance, and the cavity of the pleura contained a very large quantity of half-formed pus. The color of the lungs externally was an ill-looking purple, and the pleura over them seemed to be shrivelled, and adhered to the diaphragm. Their consistence was uniformly firm in this case.

In 1811 Dr. Elisha North published his treatise on "Spotted Fever," extracts from which have already been given. In speaking of the diagnosis, he says:—"It is obvious, however, from the great variety of symptoms which this disease exhibits, that there will be great liability to mistake it for several other diseases, particularly cynanche maligna, scarlatina, common typhus, rheumatism, hydrocephalus internus, cholera morbus, hysteria, mania, phrenitis, apoplexy, nettle-rash, colic, &c."

Until this time the epidemics had borne a very strong resemblance to what we have seen in our own day, the nervous centres being especially affected; but during the next three or four years the pneumonic form was in many places prevalent, sometimes to the exclusion of all others.

During this time the disease was seen, in the spring of 1812, in

various towns of Vermont and Maine, and in Salisbury and other towns of New Hampshire; in the State of New York, especially in the vicinity of Albany among the soldiers, in the pneumonic variety, and at Blackrock, near Buffalo, in the autumn of the same year; at Burlington, Vt., Granville, N. Y., and at Niagara in the winter of 1812-13. It appeared in Maine, at Lyme and Waterford, Conn., in Western New York, Philadelphia, and Winchester, Va., during the winter and spring of 1813; in Southern Virginia, at Chowan River, N. C., Natchez and in Eastern Mississippi in the autumn of 1813; at Bardstown, Ky., and in Talbot and Queen Ann's Counties, Maryland, during the winter of 1813-14; at Hallowell, Gardiner and Kennebeck, Me., Malone, N. Y., Natchez and in Eastern Mississippi during the winter and spring of 1814; at Berwick, Me., York County, Me., Edenton, N. C., and in Southern Virginia during the summer and winter of 1814; at East Greenwich, R. I., at what was called Northern Neck, Va., at Falmouth, Richmond and Middlebury, Va., in Southern Virginia, at Salisbury, N. C., Columbia, S. C., and Milledgeville, Ga., during the year 1815.

During this period the type of the disease was rather more sthenic in its action than that previously observed. This change in the grade of the fever was coincident with a change in the part affected. The lungs received the weight of the disease, and pneumonia was very generally observed: so general was this, and so free were the patients from all affection of the head, that the disease was considered by many as differing materially from the so-called spotted fever of former years.

Dr. James Mann, in his "Medical Sketches of the Campaigns of 1812, '13 and '14," has left us valuable information with regard to this epidemic as it appeared among the soldiers in Greenbush and other places. He says:—"It has been already observed, the sudden change of weather in October (1812) introduced additional forms of disease among the men. We have to notice one of more formidable and more questionable symptoms—pneumonia, or inflammation within the breast. This disease was, in some instances, accompanied with diarrhœa, or supervened where diarrhœa previously existed, which last disease had not entirely disappeared. The following are the most prominent symptoms:—pain in the chest; in some cases one side, in others both were affected; short and difficult respiration; dry cough; the pulse of those whose condition was most alarming was small and hard; the heat of the body and extremities not above the standard of health, sometimes below.

"This disease, when it first appeared at Greenbush, was not considered as being connected with an epidemic state of the atmosphere.

"In proportion to increase of cold, this disease became more frequent and severe.

"It may be necessary to observe, the winter epidemic of 1812-13



was a form of disease distinct from that which, in the northern districts of the Eastern States, the preceding winters, had been known by the name of *spotted fever*, although the exciting causes may have been similar. In the *spotted fever*, mental derangement was an almost general concomitant of the disease. In many instances, this affection of the brain was the first symptom of morbid action. Whereas, *pneumonia*, especially among the troops, was never accompanied with mental derangement, at its first attack, and but seldom in its more advanced stages; nor until the laborious respiration, which was a most prominent symptom at its first attack, had somewhat subsided, or the patient was at the point of death.

"This epidemic appeared under the forms of both sthenic and asthenic diathesis; although under the last it was often, if not always deceptive. In many of the first cases at Burlington, the disease proved fatal in two, three and four days, by the violence of the first attack; in some instances, in less than twenty-four hours after the first symptoms of indisposition supervened.

"The following were the most conspicuous features of the disease under its most deadly form. At the first attack the heat of the body and extremities was below the standard of health; the pulse contracted and hard, sometimes scarcely perceptible; respiration extremely laborious—not apparently so much from sharp pains through the sides and breast, as from a sense of suffocation. The patients say, upon inquiry, that they do not suffer from extreme pain, but a weight upon the chest—an oppression from inability to inhale the air.

"This epidemic was wide spread in its influence, prevailing from Lake Erie down to Lake Champlain; over Vermont, the northern counties of Connecticut, Massachusetts and New Hampshire."

"In the second stage of the disease and where there was a weak, soft pulse, bleeding was injurious; yet the antiphlogistic regimen was necessary. Here the respiration was difficult, but not suffocated, accompanied with pain in the side, and expectoration of bloody mucus; the bronchiæ were so crowded as to be incapacitated to free themselves from the load with which they were oppressed; the heat of the body was never much above the common standard of health. This form of the disease was frequently accompanied with diarrhœa.

"The third form of this disease showed itself with less questionable symptoms. At the first onset of the disease, there were strong rigors, with acute pain through the chest. The rigors were soon followed by much heat, strong pulse, cough, and no expectoration. The efforts of coughing always increased the pain in the breast."

Dr. Silas Fuller, stationed on the Niagara frontier, observed the same disease, which was not so much confined to the army, but spread more among the citizens. He says:—"The disease appears evidently to depend on some peculiar state of atmosphere as a remote cause; and an exposure to wet, cold and fatigue as an excit-

ing cause. In proportion as these causes have operated, a more or less violent form of the disease is produced. The most common form under which it has presented itself is that of sthenic pneumonia; the most fatal and unmanageable of the pneumonia notha of the old books. Under this last form it has seldom appeared.

"The asthenic form most commonly commenced with cold shivering. After some time there is a sense of heat. In some instances, the common symptoms of *pyrexia* are noticed. The pulse, however, for the most part is small, and the heat not higher in degree than natural. During the course of the disease respiration is extremely laborious, with slight erratic pains through the chest.

"A sense of weight and fulness is felt through the whole extent of the thorax, which are increased to an insupportable degree, while the patient is in a horizontal position. There is a peculiar paleness and wildness not easily described.

"This epidemic, in its sthenic form, is not always a pneumonia. The fever has sometimes appeared without any local affection, under the type of *synocha*. In a few instances, the inflammation has attacked the brain and its meninges, producing *phrenitis*. Inflammation, with suppuration in the throat and frontal sinuses, are varieties of the disease.

"The sinking stage of the disease is known by the smallness of the pulse, coldness of the extremities, dark or shining appearance of the tongue, extreme debility, with some degree of delirium, and subultus tendinum."

Jaundice during convalescence, discolored fæces, and hæmorrhages from the intestines also occurred.

During the campaign of 1814, Dr. Mann met with the same disease at the Malone Hospital:—it "was accompanied with all the same symptoms under which it appeared the preceding winter, but its attacks were less frequent. There were a few cases of disease which assumed the form of spotted fever—in which the brain seemed to be the seat of the disease; a mental derangement having been the first alarming symptom, without any pneumonic affection. All of these died within the first twenty-four hours; two of the number within six hours."

In an account of the epidemic of 1815-16 at Sharon, Mass., and vicinity, he says:—"In four or five instances this epidemic made its assault upon the head." Afterwards pneumonia supervened. Three cases out of seventy had symptoms of erysipelas.

"At Rochester, County of Plymouth, there were cases where the disease was not confined to the lungs; but the inflammation appeared under the form of cynanche trachealis, pharyngea and parotidea, as the trachea, tonsils and parotid glands were successively or simultaneously affected."

"It should be understood that, notwithstanding all the above con-

ditions, the most prominent symptoms of typhous fever do not exist in this complaint—as debility and low delirium. In a very few instances, delirium has accompanied the other symptoms of the disease, but it is always phrenitic.”

I have given such copious extracts from this work by Dr. Mann, because by his position in the army he had great advantages for the study of the disease as it appeared among the soldiers, and more clearly than any one else has given the symptoms and the objections against considering it spotted fever. It must be acknowledged that its action was much more sthenic; but the head symptoms were not absent; they did not appear at Greenbush, but were seen at Niagara, and again in another year at Malone, and afterwards at Sharon. Other symptoms, too, were present which are often found to accompany spotted fever, as sore throat, and even debility was noticed in some cases. We shall see, by other accounts, that elsewhere the disease yet more closely resembled that which we are considering; and even in the vicinity of Albany the pneumonic form was not invariably met with. The following *post mortem*, which was performed at that city in the last part of March, 1812, presented no morbid appearances in the lungs. The young man was attacked March 28th, and died in thirty-two hours. “The claret color on the surface appeared to have been produced by a slight effusion of blood into the cellular substance; the omentum was of a pink color; the bloodvessels of the mesentery and the vena portarum were distended with blood; the spleen was about four times its usual size, but of a healthy color and consistence. On cutting into it, a great quantity of grumous blood of a very fetid smell oozed out of it; the stomach was empty; the gall-bladder full of yellow bile. Nothing further was discovered in the abdomen differing from a healthy state. The lungs were of a healthy appearance; the heart and large vessels connected with it, particularly the aorta, were distended with blood; the coronary vessels were as minutely injected as I have ever seen them in the best preparations. On removing the skull-cap, the dura mater and brain were distended with blood; on making incision into any part of the brain, the cut surface was instantly covered with the blood which oozed from its vessels; the right lateral ventricle contained about a tablespoonful of serum.”\*

Dr. Southwick, of Albany, has given an account of the symptoms as he found them in his practice. His first case occurred in October, 1812, a young man who had been living at Greenbush; his second case was seen in November. Afterwards the disease became more common, and he treated many who were thus attacked. In his account he says:—“The patients now complained of pain in different parts of the body—the heels, ankles, knees, hips, small of the back, shoulders, breasts, sides and head—a heavy, painful sensation in the eyeballs;

\* Medical Repository, 3d Hexade, vol. iii.

they suffered under these pains at different times, and often at the same time.

"The most distressing chills ushered in the disease. My patients told me the chills were different from anything they ever felt before; they were peculiarly agonizing in some, and in the language of two, 'they were like throwing cold water on their hearts.' The tongue at first always pale, and its secretions inactive. This paleness of the tongue continues in the worst stages; pulse in almost all these cases little different in frequency from natural, but the sensation given to the finger by the artery *peculiar* and *new* to me; it appeared that during the intermission of each pulsation the vessel had completely emptied itself. The pulsations, though they appeared to distend the artery to its usual capacity, were weak and languid. In short, it exhibited every mark that would deter a prudent physician from bleeding.

"In the majority of cases they complained of pain in the right side and across the breast; with the last symptom a slight but frequent cough was frequently attendant."

"In the second stage the pulse became quick, feeble, and often hardly perceptible. This generally took place on the third day.

"If no favorable crisis had taken place at this time, the pain in the head or side would return sometimes with a burning sensation at the stomach attended with more or less nausea; now the breast suffered the most distressing sensations from an incapacity to fill the lungs by inspiration."\*

[To be continued.]

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## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, SEPTEMBER 13, 1866.

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### THE METRIC SYSTEM.

WITH all the perfection which modern science has attained in measuring the infinite distances of space beyond our planetary system, and in ascertaining the density and size of remote celestial bodies, as well as in the determination of the minutest markings of nature's handiwork, and of the least appreciable differences in the weight of particles, we still retain for the expression and registration of these wondrous results the uncertain standards and terms of barbarous times. That nothing could be more unsatisfactory for the purposes of science and commerce than the systems of weights and measures now employed in nearly all the civilized states of Europe and in this country is universally admitted, and an equal unanimity of opinion exists as to the advantages of the French decimal or metric system, in which weight and capacity bear a definite relation to measure, and all three are ex-

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\* Medical Repository, N. S., vol. I.

pressed in terms which convey their own meaning, and in which there is nothing arbitrary or vague. Thus we have first as the natural standard of measure the *metre*, or the ten millionth part of a line drawn from the pole to the equator, and all multiples and subdivisions of this and the other units employed are decimals and expressed, the former by Greek, the latter by Latin prefixes, as *Deca-*, *Hecto-*, *Kilo-* and *Myria-* for 10, 100, 1000 and 10,000, and *Deci-*, *Centi-* and *Milli-* for tenth, hundredth and thousandth. Liquid measure is expressed by the term *Litre*, which is a cubic decimetre; weight by *Gramme*, a cubic centimetre of distilled water at the freezing point; and solidity by *Stere*, a cubic metre. In these few lines we have the whole system in its simplicity of language and completeness of detail. Would it were as easy of adoption as of comprehension.

As our readers know, an effort was made at the last session of Congress to procure the substitution of this for our National system of weights and measures, and it is to be hoped that this may be accomplished before long, at least so far as its adoption by Government as the official standard. In this way the people would gradually become familiar with the terms, and its introduction would be as certain and universal as our decimal system of currency. Much might be effected in hastening this desirable end if scientific men would employ it exclusively in their language and works, for the study of natural science is so popular with the American people that the terms employed by authors and lecturers are rapidly adopted into common language.

In no branch of industry, trade or profession, however, is there so great confusion in this particular or so much need of the adoption of the metric system as in our own art. Not only are there the two distinct systems of Avoirdupois and Troy weights with the same terms, by one of which medicines are bought while they are dispensed by the other, but the terms for liquid measure, both Wine and Imperial, are likewise identical with those of the former, so that all four are frequently confounded and differently interpreted by physician and apothecary, and not infrequently, we apprehend, does the former write his recipe with the vaguest notions of the absolute quantities he is prescribing, and trusting that the druggist will understand it all if he does not. The substitution of the *gramme* and *litre* in pharmacy for this unfortunate medley would at once remove this embarrassment. In the preparation of the last Pharmacopœia the words *grains* and *troy ounces* are alone used to express weight, while the old wine measure is retained. We trust that long before the time for the fifth decennial revision of that work the profession will have adopted by general consent the simple metric system of France, for it is only by such steps on the part of learned bodies, for whom such changes are not impracticable, that its universal adoption will be accomplished.

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*Cholera in Boston.*—At the meeting of the Board of Aldermen on Monday, Dr. Read, City Physician, reported the death of a man on Bremen Street, East Boston, of Asiatic cholera, and expressed the opinion that he contracted the disease at Philadelphia. Precautions were taken to prevent the spread of the disease. Several cases of sickness have recently occurred near Northampton Street in Roxbury and Boston, some of which have terminated fatally, which have also

been called cholera. We trust that the City Physician will enforce the same rigid precautions in this locality which have been thus far so effective in preventing the spread of the pestilence in this city.

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*American Medical Association.*—The Committee of Publication have issued the following circular:—"The Committee of Publication are obliged to appeal to the members of the American Medical Association for contributions of money to defray the expenses of printing and illustrating the transactions of the last meeting. The amount of assessments at the meeting in Baltimore falls short of that required by more than one thousand dollars, and unless this deficiency is supplied the volume cannot be published. Many members have expressed their willingness to contribute, and one has agreed to give a hundred dollars if there is any prospect of aid from others. You are earnestly requested to contribute, and to forward whatever amount you may be disposed to give to Dr. C. Wister, 1303 Arch Street, Philadelphia, Pa."

The Prize Essay Committee of the American Medical Association request that all communications to be submitted to them be sent to the Chairman before the 15th day of March next, accompanied by a sealed envelope containing the name and address of the authors. The Association offers two prizes of one hundred dollars each for the best two essays on any subject connected with the medical sciences.

F. DONALDSON, *Chairman.*

W. CHEW VAN BIBBER,  
JOSIAH SIMPSON,

EDWARD WARREN,  
C. C. COX.

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*A Suggestion.*—It is not a little remarkable that an age which has invented steam-travelling and the despatch of messages by electricity should still content itself with a method of handwriting which is laborious and occupies a very unnecessary length of time. We travel six times as fast as our forefathers; we telegraph with the speed of lightning; but our ordinary written language is just as long and tedious as ever it was in days gone by. For the purposes of social intercourse this is not a matter of much moment, nor is it likely that any great change would find favor with the world at large. But to men engaged in scientific occupations who have to write much, and whose time is very limited, there can be little doubt that a common system of abbreviation would prove a great boon. There are numbers of medical practitioners, for instance, who would find it of immense advantage to keep notes of their patient's cases, and are only prevented from doing so by the expenditure of time and labor which, under existing circumstances, would be thereby entailed. If the adoption of a system of shorthand could be generally agreed upon by scientific men, an amount of convenience would be experienced the importance of which it is difficult to over-estimate. We are convinced that sooner or later a scheme of this kind *must* be adopted. There is no reason why our profession should not assume the initiative in its introduction.

The great difficulty to be overcome in the institution of such a method arises from the existence of a wide-spread misapprehension. At least ninety-nine persons out of a hundred are under the impression that years of application are required for learning shorthand. And

doubtless, in order to acquire such dexterity in the art as enables a reporter to follow a rapid speaker, months, perhaps years of practice are necessary. But the art itself can be learned in a week. A very few weeks' practice will then enable the learner to jot down with singular ease, and in a concise form, notes which would entail much space and labor if the ordinary handwriting were employed.

The clearest and most simple method is probably Mason's. This was introduced a hundred and fifty years ago; and although since that time nearly two hundred other systems have appeared, it still holds its ground, and is now adopted by nearly all professional reporters.\*

The time must come when printers will learn to compose in the ordinary type from MSS. written in shorthand. The relief which this will give authors can only be estimated by those who will take the pains to compare the simple marks used in shorthand with the lengthy and laborious process of ordinary writing. But until there is a demand for this kind of work, it is not likely that printers will take the trouble to acquire the art. It is quite worth the while of members of our profession to look into this, and for that reason we have thought that a brief reference to it was not out of place in our columns.—*London Lancet.*

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*Chloride of Sodium in the Treatment of Wounds.*—This is one of the most important discoveries of the present day for inducing the speedy cicatrization of wounds and for obviating the dangers that sometimes result. A great many agents have been employed for this purpose, as coal-tar, phenic acid, camphorated alcohol, chlorate of potassa, and other compounds of chlorine, and latterly the sulphites. Amongst these different agents, none are more useful as disinfectants than the compounds of chlorine; but strange to say, the chloride of sodium, which is the most common, and is always at hand, is rarely used by the profession. It is not, however, that experience has failed to testify to its worth; for many very able and interesting articles have been written on its use in the treatment of wounds, and submitted to the profession. Latterly, Dr. V. Dervandre has published an article on the value of the chloride of sodium in the treatment of wounds, the more valuable, adds this author, because it can be always procured. The first effect of the chloride of sodium on a wound which is fœtid, is to induce the immediate disappearance of the bad odor. Another immediate phenomenon observed is the pinkish hue which it gives the decomposed sanguineous blackish liquid which covers the wound. At the same time, there is experienced a sensation of cold and of pricking in the wound, which may even become slightly painful. The suppuration diminishes rapidly in quantity, and, if sanious, it becomes healthy in a few days. The wound granulates and cicatrizes rapidly. The change evidenced in wounds by the chloride of sodium has a happy effect on the system. The appetite improves, and the patients acquire strength. In support of the value of a solution of this salt, Dr. Dervandre reports 400 cases of wounds thus treated. In one case only was there pyæmia. There was neither erysipelas, nor tetanus,

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\* The process is clearly explained in a small work, "Parliamentary Shorthand, by Thompson Cooper," published by Bell and Daldy, Fleet Street.



nor hospital gangrene present in any of his cases, though the hygienic condition of the hospital under his care was bad. The solutions used by Dr. Dervandre are not of the same strength. At first he uses a solution of about two drachms to two pints of water. In a few days afterwards he resorts to concentrated solution. These solutions are injected in fistulous tracts or on the surface, according to the nature of the wounds.—*Union Médicale—Richmond Medical Journal.*

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*Relief for Spasmodic Asthma.*—Dr. J. S. Monell, in a communication to the *Medical Record* on this subject, writes as follows :—

“ Having been a sufferer from frequent, severe and protracted attacks of spasmodic asthma for a period of fifteen years, and having by accident hit upon a means for speedy relief, I am induced to present the same to the profession, in the hope that by its adoption it may prove as beneficial to such as are subject to attacks of this distressing affection as it has been to myself and to some of my patients.

“ In December, 1865, I was having a severe attack of asthma one evening about nine o'clock. I placed myself standing at the foot of my bed, with my arms folded upon the foot-board for a pillow, the forehead resting upon the folded arms, and the feet placed a sufficient distance to make a partial semicircle of the body. While laboring severely for air, the thought occurred to me to cease breathing for a few seconds. I did so, and after several trials I felt some relief. I then expired all the air that it was possible to, after which I determined not to inspire again until I found it absolutely necessary. I succeeded in waiting several seconds, then inspiration was carried to its fullest capacity, and retained with great effort for many seconds. This act of forced expiration, waiting, thorough inspiration, and again waiting, was continued for some fifteen minutes, and to my delight the spasm was perfectly relieved. I have since relieved several similar attacks by the same method in less than two minutes.

“ I have advised this course for many others, and their testimony has been uniformly satisfactory, except in one instance, that of an aged lady with heart disease. It requires a great effort on the part of the patient to perform the act. It is well for the medical adviser to perform it personally in presence of the patient, and then desire him to perform it once or twice under his supervision. The first attempt of retaining the inspired air during the asthmatic attack will cause the patient to think he cannot continue it, but perseverance will soon delight him with relief from the spasm.”

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*Ivory.*—The number of elephants that must be destroyed annually to meet the demand for ivory is absolutely enormous. It is stated on good authority that the cutlery establishments of Sheffield alone consume annually the ivory which is supplied by slaying more than 20,000 elephants; and every country must have its supply. The other sources from which ivory is obtained, the walrus, the narwal, &c., afford but an insignificant item in the supply, and as no other substance has been discovered or invented which can take its place, and as the demand is constantly on the increase from year to year, it would seem that the race of elephants may before long become ex-

tinct. The best ivory known is that which comes from Africa, for though it is not so white as that furnished by the Asiatic elephants, it preserves its color best, is most transparent, freest from cracks, and receives the highest polish. This is owing to the fact that the African ivory contains about equal parts of animal and earthy matter, while in the Asiatic the proportion of earthy matter is greater. One great source of the supply of ivory in Russia and the northern countries of Europe is the tusks of extinct species of elephants and mammoths, which are found in the banks of the rivers of Northern Siberia in a remarkable state of preservation. In very cold countries ivory of fossil elephants is preserved for ages. In our own country the fossil remains occasionally dug up are dry and brittle; but boiling in a solution of gelatine will supply the want of the original albuminous matter. So, on the other hand, by dissolving a portion of the earthy matter, which is one of the principal ingredients, ivory retains its tenacity, but becomes exceedingly flexible. It is thus prepared for making surgical instruments. What will supply the place of ivory when the race of elephants is destroyed we cannot tell, but ingenuity is already at work to furnish a substitute, and is stimulated by the offer of large rewards. A short time since a reward of 5,000 dollars was offered in this country by parties interested in the manufacture of billiard balls, for a substance possessing the same qualities in about the same proportions. Ivory has the elasticity which adapts it to this purpose, but as it is affected by dampness and expands unequally, according to the grain, it is found that the balls do not retain their perfect sphericity in all states of the atmosphere. For this reason, and on account of its increasing scarcity, some other substance is in demand. Vegetable ivory, so called, is used in making many articles, but is of comparatively little value. There seems to be more hope that the requisite material will be obtained from some compound of India-rubber or gutta-percha than from any other source.—*New York Journal of Commerce.*

#### VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, SEPTEMBER 8th, 1866.

##### DEATHS.

	Males.	Females.	Total.
Deaths during the week	50	45	95
Ave. mortality of corresponding weeks for ten years, 1855—1865	51.9	52.4	104.3
Average corrected to increased population	00	00	114.55
Death of persons above 90	0	0	0

DIED.—In Bingham, Me., on the 16th of November, 1865, Zachariah Spaulding, M.D., aged 66 years.

DEATHS IN BOSTON for the week ending Saturday noon, Sept. 8th, 95. Males, 50—Females, 45. Accident, 5—aneurism, 1—apoplexy, 1—inflammation of the bowels, 1—congestion of the brain, 1—disease of the brain, 3—bronchitis, 2—cholera infantum, 13—cholera morbus, 9—consumption, 15—croup, 4—cystitis, 1—diarrhoea, 2—diphtheria, 2—dropsy, 2—dropsy of the brain, 1—drowned, 2—dysentery, 4—scarlet fever, 1—typhoid fever, 2—disease of the heart, 3—infantile disease, 6—congestion of the lungs, 1—inflammation of the lungs, 2—measles, 1—old age, 1—premature birth, 3—spina bifida, 1—syphilis, 1—ulcers, 1—unknown, 2—whooping cough, 1.

Under 5 years of age, 44—between 5 and 20 years, 6—between 20 and 40 years, 22—between 40 and 60 years, 16—above 60 years, 7. Born in the United States, 63—Ireland, 23—other places, 9.